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Research Article

Exclusive Breastfeeding and Nutritional Status of Toddlers in a Community Health Center

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Abstract:

Background: The nutritional status of toddlers serves as a key marker of their overall health and development, influencing cognitive abilities, immune function, and long-term productivity. Exclusive breastfeeding in the first six months is essential for supporting and enhancing nutritional well-being during early childhood. Nevertheless, public understanding of the critical benefits of exclusive breastfeeding is still limited.
Aims: This study aimed to analyze the relationship between exclusive breastfeeding and the nutritional status of toddlers in the working area of Dawe Public Health Center, Kudus Regency.
Methods: This study employed a quantitative analytic approach with a cross-sectional design. A total of 71 mothers with toddlers were selected through random sampling. Exclusive breastfeeding served as the independent variable, while the toddler's nutritional status was the dependent variable, measured using the *Kartu Menuju Sehat* (KMS) growth chart. Data collection was conducted through questionnaires and document analysis, and the results were analyzed using the chi-square statistical test.
Results: The results of the analysis revealed a statistically significant association between exclusive breastfeeding and toddlers' nutritional status, as evidenced by a p-value of 0.001 ($p < 0.05$). This suggests that toddlers who were exclusively breastfed were more likely to exhibit better nutritional outcomes.
Conclusion: A significant correlation exists between exclusive breastfeeding and the nutritional status of toddlers. Consequently, it is essential to enhance health education efforts for mothers regarding the benefits of exclusive breastfeeding. In addition, ongoing support from healthcare providers is crucial to increase awareness and promote better exclusive breastfeeding practices within the community.

Keywords: Exclusive Breastfeeding; Nutritional Status; Rural; Toddlers

1. INTRODUCTION

Nutritional status indicates the progress of health development programs because it determines human welfare and health. Nutritional status will affect intelligence, endurance, and productivity. Good nutritional status will contribute to a person's health status. Direct and indirect causal factors can influence the nutritional status of toddlers. Providing exclusive breast milk (ASI) is one factor that influences toddlers' nutritional status. The level of awareness among Indonesian people regarding giving breast milk to their babies is still very worrying (Iqbal & Suharmanto, 2020).

Early-age malnutrition contributes to higher infant and child mortality rates, increases susceptibility to illness, and can lead to suboptimal physical development in adulthood. In 2022, it is estimated that 148 million (144–152 million) children under the age of 5 worldwide will experience stunting (a height that is too low for their age), and 45 million (36–54 million) will experience wasting (a body weight that is too low for their height). However, in the last three decades, malnutrition in children under 5 years of age, as seen from the number of children affected by stunting and wasting, has decreased. Children experiencing malnutrition decreased from 259 million (252–266 million) in 1990 to 148 million (144–152 million) in 2022.

Over the same period, the number of children experiencing wasting decreased from 59 million (54–64 million) to 45 million (36–54 million). Global prevalence (SDG indicator 2.2.1) almost halved, from 40.2% (39.1–41.3%) in 1990 to 22.3% (21.8–22.9%) in 2022. The prevalence of wasting (SDG indicator 2.2.2) also decreased by 26%, from 9.2% (8.4–10.0%) to 6.8% (5.5–8.1%). (Health & statistics, 2024). The under-five mortality rate is the number of deaths of children aged 0–5 years per 1,000 live births in one year. This reflects the health problems of children under five, the quality of

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mother and child health services, the effectiveness of the mother and child health program, and environmental sanitation conditions. In Kudus Regency, the under-five mortality rate in 2022 was 1.4 per 1,000 live births. The neonatal mortality rate from 2018 to 2022 experienced mild fluctuations, while the infant mortality rate, which was low in 2018, increased sharply until 2022. Likewise, the mortality rate of the under-five group showed relatively stable fluctuations during the same period.

Coverage of infant health services in Kudus Regency in 2022 will reach 95.8 percent of 14,010 babies. For toddler health services, coverage of toddler growth and development screening in Kudus Regency reached 87.5%, or 59,598, while integrated management services for healthy toddlers served 28,944. Dawe Community Health Center reported the best coverage of toddler services, with 5,343 toddlers served for growth and development screening and 2,901 for integrated management of healthy toddlers out of a total of 5,353 toddlers. The percentage of exclusive breastfeeding for babies aged 0-6 months in Kudus Regency in 2022 will be 55.3 percent (Kudus Regency Health Office, 2022).

Based on preliminary data in the Dawe Community Health Center area, Dawe District, Kudus Regency, in 2024, results were obtained from 9 posyandu of 240 toddlers, with a total of 129 toddlers (3.7%) experiencing stunting. Based on a preliminary study conducted by researchers on July 14, 2024, at one of the Dawe community health centers, health education is usually carried out frequently from the community health center. Efforts to prevent stunting by holding posyandu for toddlers are carried out in villages by carrying out anthropometric measurements based on indicators of height according to age (TB/U) and body weight.

Factors influencing toddler nutrition are diet, history of infectious diseases, level of parents' knowledge, number of children, parents' employment, parents' education, and the mother's nutritional status during pregnancy. The consequences of delayed growth and inadequate nutrition include both short- and long-term effects. In the short term, children may become apathetic and exhibit speech and developmental delays. Over the long term, these issues can lead to reduced intellectual capacity, impaired cognitive development, and diminished sensory integration. Nutritional status is a condition experienced by toddlers due to the food and use of nutrients consumed by toddlers. The nutritional status and growth and development of toddlers are assessed using anthropometry. Anthropometry is a way to measure height, weight, arm, head, and chest measurements in toddlers (Margarita Harvin Dwi Oktaviani *et al*., 2022; Murzen, 2024).

Exclusive breastfeeding is strongly linked to both undernutrition and overnutrition (obesity) in children. It serves as a critical source of energy and essential nutrients for children between the ages of 6 and 24 months. For infants aged 6 to 12 months, exclusive breastfeeding meets more than half of their energy requirements, and about one-third for those aged 12 to 24 months. In addition, breast milk plays a vital role in supporting recovery during periods of illness in children (Hamid & Hamdin, 2023).

Several studies have demonstrated a significant association between exclusive breastfeeding and the nutritional status of young children. Rumbo (2020) found a notable correlation between a history of exclusive breastfeeding during infancy and the nutritional status of toddlers. Similarly, research by Jum *et al*. (2022) identified a link between exclusive breastfeeding history and the nutritional status of infants aged 6–12 months. Fitriani et al. (2022) also reported significant relationships between exclusive breastfeeding ($p = 0.005$), the timing of complementary food introduction ($p = 0.002$), and nutritional status. Furthermore, Rasjid *et al.* (2021) concluded that there was a partial association between toddlers' nutritional status and the incidence of diarrhea. Meanwhile, Hamid *et al*. (2020) reported a connection between exclusive breastfeeding and weight-for-length (WFL), indicating a broader relationship between exclusive breastfeeding and weight-for-age (WFA) measurements.

Differences between researchers with previous research include that the population and sample were specific to a certain age. In contrast, the study uses a population and sample of all groups of toddlers who experience malnutrition. As health workers, nurses can explore the factors that influence the success of exclusive breastfeeding. Nurses can increase knowledge, skills, professionalism, recognition, and appreciation in the work environment and strengthen relationships with patients and the community. Nurses play a role in preventing malnutrition through promotive and preventive actions. Promotive measures include counseling to mothers of toddlers and posyandu cadres, while preventive measures include weighing activities and measuring arm circumference and height, which are carried out every month at the posyandu, as well as providing medicine and food packages to restore nutrition.

Nurses also play a role as educators in dealing with nutritional problems for toddlers. The most crucial role is to reduce health risks and improve the health status of toddlers who experience malnutrition. Therefore, it is important to strengthen the role of nurses in providing health education, especially in dealing with nutritional problems for toddlers. Nurses' duties include providing breast milk, immunizations, meeting nutritional needs through appropriate food, access to health services, and implementing a healthy lifestyle. This research aims to analyze the relationship between exclusive breastfeeding and the nutritional status of toddlers.

Although many studies have explored the relationship between exclusive breastfeeding and the nutritional status of toddlers, this research holds its own urgency and relevance as it is conducted within the working area of Dawe Public Health Center, Kudus Regency, which has several unique characteristics. This area includes rural regions with limited access to health information and a population whose education level mostly does not extend beyond junior high school.

The geographical and socioeconomic characteristics of Dawe, located in a highland area, also influence the availability of health services, including the distribution of healthcare workers and educational facilities. Unlike previous studies that were generally conducted in urban areas or tertiary health facilities, this study focuses on rural communities that represent the real-world challenges in the practice of exclusive breastfeeding.

In addition, this research integrates an evaluative approach to health center interventions such as *posyandu* (integrated service posts), nutrition education, and the Integrated Management of Healthy Toddlers program, which are actively implemented in the working area of Dawe Public Health Center. Thus, this study not only provides an overview of the relationship between exclusive breastfeeding and nutritional status but also evaluates the effectiveness of the promotive-preventive strategies that have been carried out. Therefore, this study is important to provide a basis for the development of contextual and targeted health policies in rural areas, as well as to strengthen the role of frontline health workers, such as nurses and midwives, in improving exclusive breastfeeding practices.

2. MATERIALS AND METHODS

This research uses a quantitative correlation analytical design with a cross-sectional approach. Variable independent, namely exclusive breastfeeding, and variable dependent, which is the nutritional status of toddlers. This research was conducted in the Dawe Community Health Center Working Area, Kudus Regency, in January 2025. The research sample consisted of 71 mothers with toddlers, who were selected using a simple random sampling technique by lottery sampling. The researcher drew numbers or names of population members written on paper, then shuffled and randomly selected research samples. The research instrument used an exclusive breastfeeding questionnaire developed by SHELEMO consisting of 19 questions with answer choices of strongly agree (5), agree (4), unsure (3), disagree (2), and disagree (1). Interpretation of results was categorized as good (80-100%), sufficient (51-79%), and poor (< 50%). Adequate nutrition is reflected by a weight-for-age Z-score ranging from -2 SD to 2 SD. A Z-score between -3 SD and < -2 SD indicates undernutrition, while a Z-score below -3 SD signifies severe malnutrition. The findings of this study revealed that most respondents had a normal nutritional status. This suggests that the majority of children are growing in accordance with established health standards, although some toddlers were still categorized as undernourished or severely malnourished.

Researchers explain the objectives, benefits, rights, and obligations of respondents in the study to potential respondents. Respondents fill out a consent form if they are willing to become research respondents. Respondents filled out the questionnaire, and the researcher checked the answers to the questionnaire. Data analysis used the chi-square test. This study received ethical approval from the Health Research Ethics Committee (KEPK) of Universitas Muhammadiyah Kudus on January 15, 2025, under approval number 124/Z-7/KEPK/UMKU/VI/2025.

3. RESULT AND DISCUSSION

3.1. RESULT

Table 1. Characteristics of Toddler Caregivers Based on Age (n=71)

Variable	Mean	Median	Min-Max	SD
Age (years)	27,15	27	22-26	2,806

Table 1 explains that the average age of toddler caregivers is 27.15 years with a median of 27 years, the lowest age is 22 years, the highest age is 36 years, and the SD is 2.806.

Table 2. Characteristics of Caregivers and Toddlers Based on Gender, Occupation, and Education (n=71)

Characteristics	f	%
Employee	14	19.7
Toddler's Gender		
Female	30	42.3
Male	41	57.7
Caregiver's Occupation		
Unemployed	7	9.9
Housewife	36	50.7
Farmer	4	5.6
Self-employed	8	11.3
Trader	1	1.4
Others	1	1.4
Caregiver's Education		
Elementary school	3	4.2
Junior high school	45	63.4
Senior high school	21	29.6
College	2	2.8
Total	**71**	**100**

Table 2, which includes 71 respondents, shows that most toddlers are male, namely 41 respondents (42.3%). Meanwhile, the majority of respondents' occupations, namely 36 respondents (50.7%), were homemakers. Most respondents had a final education at the junior high school level, 45 respondents (63.4%). Based on the gender of the toddlers, it was found that the majority were male.

Table 3. Exclusive Breastfeeding for Toddlers (n=71)

Exclusive breastfeeding	f	%
Not enough	35	49,3
Enough	28	39,4
Good	8	11,3
Total	71	100

Table 3 shows that the majority of exclusively breastfed children under five are given less exclusive breast milk, namely 35 respondents, or 49.3%. This study categorized exclusive breastfeeding into three categories: sound, sufficient, and poor. Good, namely giving exclusive breast milk for a full 6 months without additional food or drink (except medication if necessary).

Table 4. Nutritional Status in Toddlers (n=71)

Nutritional status	f	%
Bad	13	18,3
Not enough	24	33,8
Good	34	47,9
Total	71	100

Based on Table 4, it is known that the majority of respondents have good nutritional status, namely 34 respondents (47.9%). In this study, toddlers' nutritional status was classified into three categories: normal, undernourished, and severely undernourished. A child is considered to have normal nutritional status when their weight-for-age Z-score falls between -2 SD and 2 SD. Undernutrition is indicated by a Z-score between -3 SD and less than -2 SD, while severe undernutrition is identified when the Z-score is below -3 SD.

Table 5. The Relationship between Exclusive Breastfeeding and Nutritional Status in Toddlers

Exclusive breastfeeding	Nutritional status							p-value
	Bad		Not enough		Good		Total	
	f	%	f	%	f	%	N	
Not enough	13	37,1	22	62,9	0	0	35	**0,001**
Enough	0	0	0	0	28	100	28	
Good	0	0	2	25	6	75	8	
Total	13	37,1	24	88	34	175	71	

The data in Table 5 shows a statistically significant relationship between exclusive breastfeeding and nutritional status, with sufficient strength of the relationship (p = 0.001). Most exclusively breastfed respondents were in the sufficient category, with as many as 28 people (100%) whose nutritional status was also in the good category.

3.2. DISCUSSION

Implications

Based on the results of research in the Dawe Community Health Center working area, it was found that the average (mean) age of respondents was in the adult category aged 26-45 years. This age range shows that most parents of toddlers are productive in this age group. The findings of this study are in agreement with the research by Nilakesuma *et al.* (2020), which indicated that most respondents in their study on toddler nutritional status and exclusive breastfeeding were within the 20–40 years age group. Similarly, the results are supported by Clancy *et al.* (2021), who reported that 62 respondents (79.5%) fell within the 21–40 years age such as work, education, and nutritional awareness, can influence the nutritional status of toddlers. Therefore, intervention is needed in the form of nutrition education and policy support to increase understanding and category. According to Kebo *et al.* (2021), adulthood is when a person has greater control over family health. However, work factors and time constraints often become obstacles to adopting a healthy lifestyle, especially regarding exclusive breastfeeding and nutritional needs for toddlers. Thus, even though the parents' age is in the productive range, other factors, implementation of healthy living among parents of toddlers (Febrianti *et al.*, 2024).

This study's results align with research (Nur Aziza *et al.*, 2024), which states that most toddlers are found in boys, with a percentage reaching 56.5%. Another study by Nur Aziza *et al.* (2024) also said that most children were boys, with a prevalence reaching 51.8%. These distribution differences can be influenced by various factors, including natural birth patterns and sociocultural factors; in nutritional research, a child's gender is often associated with differences in nutritional needs. Several studies show male toddlers have higher energy requirements than female toddlers due to higher metabolic rates and physical activity. Thus, the child's gender should not be a differentiating factor in providing nutrition.

Based on educational level, the majority of respondents had their final education at the junior high school level. The findings of this study are consistent with those of Mardiana and Yunafri (2021), who found that the

majority of respondents at the Wonosari Community Health Center had a junior high school education level, with 40 individuals (65%) falling into this category. Another research by Shaputri and Dewanto (2023) found that of the 80 respondents studied, the majority had a junior high school education (60%). The level of parental education is related to children's access to health information, including in terms of providing balanced nutrition. Low parental education can impact limitations in understanding the importance of balanced nutrition and the practice of providing nutritious breast milk for children. However, other factors, such as experience and involvement in health education activities, can also help increase parents' understanding of nutrition. This condition shows that even though the education level of the majority of parents is only junior high school, ongoing nutrition education interventions are still needed to ensure a good understanding of optimal nutritional intake for toddlers. Therefore, more effective nutrition counseling and education programs must be implemented so parents with a secondary education background can better understand and apply healthy breastfeeding patterns for their children (Wahyuni *et al*., 2023).

The majority of respondents, totaling 36 individuals (50.7%), were housewives. This finding is in accordance with the study by Prihatiningsih *et al*. (2022), which reported that most of their participants were also housewives (57.7%). Research by Sandy (2019) also shows that the majority are housewives (80.8%). Economic and social factors often influence a mother's decision to stay home caring for children or work outside the home. Working mothers often face challenges managing time between work and childcare, which can impact exclusive breastfeeding. However, parents' work is not directly linked to nutritional status or exclusive breastfeeding but instead points to the fact that the majority of parents with toddlers choose to be homemakers.

Frequency of breastfeeding according to the baby's needs (on-demand), both day and night. Bad, namely giving exclusive breast milk but not consistently (for example, additional formula milk or complementary food before 6 months), The frequency of breastfeeding is irregular or depends on the schedule, not the baby's needs. Less, namely not giving exclusive breast milk or stopping before 4 months. The baby consumes more formula milk or other foods from an early age. The research results obtained in the Dawe Community Health Center area show that most respondents who provide exclusive breastfeeding are in the poor category. This data shows that the majority of mothers do not provide optimal exclusive breastfeeding to their babies, which contributes to the poor nutritional status of children.

These findings suggest that challenges remain in adhering to health guidelines for exclusive breastfeeding, highlighting the need for continued education on the critical importance of exclusive breastfeeding during the first six months of an infant's life. The results of this study are in line with research (Chyntaka & Putri, 2020), which states that as many as 57.6% of mothers who do not provide exclusive breastfeeding have children with poor nutritional status. The main factors that influence exclusive breastfeeding include lack of family support, myths about breastfeeding, and low awareness of mothers about the benefits of exclusive breastfeeding for children's growth and development.

The findings of this study indicate that most respondents' toddlers have a normal nutritional status. This suggests that the majority of children are growing in line with established health standards, although some still fall into the undernourished and severely undernourished categories. These results highlight the importance of ongoing nutritional assessments to support optimal child growth and development. This study is consistent with the findings of Sandy (2019), who reported that toddlers' nutritional status is significantly influenced by parenting practices, particularly in ensuring balanced breastfeeding. In that study, 90.4% of toddlers were found to have good nutritional status, reinforcing the idea that environmental conditions and parental knowledge are key determinants of children's nutritional outcomes.

Research by Iqbal and Suharmanto (2020) also highlights that the socioeconomic status of families plays a significant role in determining the nutritional status of toddlers. Low-income households are more likely to have children with poor nutrition due to limited access to healthy food and healthcare services. This underscores the importance of government involvement in providing nutritional support and educational programs aimed at improving families' understanding of proper nutrition for young children. Therefore, a more holistic approach is needed to enhance toddlers' nutritional status, including educating mothers on the benefits of exclusive breastfeeding, routinely monitoring child growth, and ensuring access to affordable nutritious foods for economically disadvantaged communities. These efforts are expected to improve child nutrition and reduce the prevalence of malnutrition among toddlers.

Exclusive breast milk can improve the nutritional status of toddlers because it contains all the nutrients babies need for optimal growth and development during the first six months of life. The nutritional composition of breast milk is naturally designed to meet the baby's needs, both in terms of energy and other nutrients. Apart from that, exclusive breastfeeding also protects babies from infections and diseases that often cause malnutrition. Breast milk contains a balanced nutritional composition that meets the baby's needs, including protein, fat, carbohydrates, vitamins, and minerals. Breast milk also contains enzymes and hormones that support the baby's digestion and metabolism. Regulation of metabolism: Nutrients in breast milk support the baby's metabolism, providing energy and raw materials for growth and strengthening the immune system. Antibodies and immune cells in breast milk protect the baby from infection, reducing nutritional loss due to disease—gut microbiota development. Prebiotic substances in breast milk encourage the growth of healthy gut microbiota, which helps the absorption of

important nutrients such as calcium and iron. Growth hormone regulation. Breast milk contains hormones such as insulin and leptin, which support the growth of body cells and help babies regulate their eating patterns. (Sandy, 2019).

The study revealed a statistically significant association between exclusive breastfeeding and the nutritional status of toddlers, as indicated by a p-value of 0.001 ($p < 0.05$). Most toddlers do not receive optimal/less exclusive breastfeeding, but their nutritional status remains in the good category. This can be caused by several factors, including giving complementary breast milk (MP-ASI) before the baby reaches 6 months. Even though this practice does not follow WHO recommendations, if the MP-ASI given has sufficient nutritional content and meets the baby's needs, then this can help maintain a good nutritional status. In addition, favorable family socioeconomic conditions play a crucial role by enabling access to nutritious food and adequate healthcare services.

Furthermore, mothers with a strong understanding of nutrition are generally more capable of meeting their infants' dietary needs, including by using alternatives to exclusive breastfeeding, such as formula milk (Wicaksana & Rachman, 2019). Most toddlers who are exclusively breastfed tend to exhibit better nutritional status compared to those who are not. Another contributing factor is the role of healthcare professionals in educating mothers about the benefits of exclusive breastfeeding, particularly among working mothers. These mothers often face challenges in sustaining exclusive breastfeeding due to time constraints and limited access to breastfeeding facilities in the workplace.

A study by Sulastri and Sari (2024), published in the *Women's Health Journal*, found that mothers with access to lactation rooms at their workplace are more likely to continue exclusive breastfeeding compared to those without such facilities. Therefore, strategies to promote exclusive breastfeeding should include enhanced maternal education, the provision of breastfeeding facilities in workplaces, and ongoing support from both partners and healthcare providers. These efforts are expected to positively influence the nutritional status of toddlers in the Dawe Community Health Center service area. Supporting this, Jum *et al.* (2022) also reported that toddlers' nutritional status is strongly associated with exclusive breastfeeding and post-breastfeeding dietary habits. Their study found that 30% of toddlers who were exclusively breastfed had good nutritional status, whereas those who were not breastfed exclusively were more prone to undernutrition and poor nutritional outcomes. These findings highlight the significant benefits of exclusive breastfeeding for children's nutritional well-being.

Research by Fitriani *et al.* (2022) also demonstrates a link between exclusive breastfeeding and infant nutritional status, indicating that babies who are not exclusively breastfed are at a greater risk of malnutrition compared to those who are. Breast milk provides essential nutrients crucial for a baby's development, and insufficient exclusive breastfeeding can negatively affect a child's growth and development. Proper exclusive breastfeeding supports optimal nutritional status, lowers the risk of stunting, and strengthens the infant's immune system against infections. Inadequate breastfeeding is often linked to the early introduction of complementary foods, which may lead to digestive problems and increase the risk of malnutrition. Therefore, further interventions are needed, including educating mothers about the importance of exclusive breastfeeding, enhancing support from healthcare providers, and implementing supportive policies for breastfeeding mothers. These efforts can help increase exclusive breastfeeding rates and positively influence toddlers' nutritional outcomes.

The findings of this study underscore the vital role of exclusive breastfeeding in determining the nutritional status of toddlers. The strong association between exclusive breastfeeding practices and improved nutritional outcomes emphasizes the need for community health initiatives to promote, educate, and support exclusive breastfeeding, particularly during the first six months of life. These results also reinforce the importance of maternal education and counseling services in enhancing child health outcomes at the primary healthcare level.

Research Contribution

This study contributes to the growing body of literature linking infant feeding practices with child nutritional outcomes in low- to middle-income settings. It provides evidence from a community health center context, adding localized insights that can inform policy and program implementation in similar healthcare settings. Moreover, the study supports global recommendations from WHO and UNICEF regarding the benefits of exclusive breastfeeding in preventing malnutrition in early childhood.

Limitations

This research is subject to several limitations. First, the cross-sectional design does not allow for the establishment of causal relationships between exclusive breastfeeding and nutritional status. Second, the data relied on self-reported breastfeeding history, which may be subject to recall bias. Additionally, the study was limited to one community health center, which may affect the generalizability of the findings to broader populations with different demographic and socioeconomic characteristics.

Suggestions

Future research should consider longitudinal or cohort designs to better assess the causal effects of exclusive breastfeeding on child nutrition. Expanding the study to multiple health centers or districts could enhance the generalizability of the results. It is also recommended that health policymakers and practitioners develop targeted interventions and educational campaigns to raise awareness about the long-term benefits of exclusive breastfeeding. Finally, community-based support systems, such as peer counseling and

breastfeeding support groups, should be strengthened to improve breastfeeding practices at the grassroots level.

4. CONCLUSION

Exclusive breastfeeding is closely associated with the nutritional status of toddlers. To enhance toddler nutrition, it is important for mothers to gain a deeper understanding of the vital role exclusive breastfeeding plays during the first six months of life in supporting optimal growth and nutritional well-being. Mothers are more active in seeking information and participating in educational programs about exclusive breastfeeding provided by health workers at community health centers or posyandu. It is necessary to increase education and counseling programs about exclusive breastfeeding through posyandu activities and home visits for breastfeeding mothers, with outreach and educational activities to monitor toddlers' growth and nutritional status regularly. The research results that have been carried out can be used as input for the Universitas Muhammadiyah Kudus educational institute to develop knowledge related to exclusive breastfeeding. The research results become study material integrated into the learning process at both the academic and clinical stages, especially in maternity, child nursing, and health education courses. Future researchers are expected to be able to explore more broadly other factors influencing the nutritional status of toddlers apart from exclusive breastfeeding, such as eating patterns after the exclusive breastfeeding period, socioeconomics, and parenting patterns.

The role of nurses and healthcare workers is crucial in supporting the success of exclusive breastfeeding. As health educators, nurses have the responsibility to provide information about the benefits of exclusive breastfeeding, proper breastfeeding techniques, and lactation management to mothers, both during pregnancy and after childbirth. This education can be delivered through counseling at health centers, home visits, or *posyandu* (integrated health post) activities. In addition, nurses also act as advocates in promoting a supportive environment for breastfeeding mothers, including in the workplace.

The availability of lactation rooms at workplaces is one of the essential structural supports. Working mothers often face time constraints and limited access to breastfeeding or expressing breast milk during working hours. Studies show that mothers with access to lactation rooms are more likely to maintain exclusive breastfeeding compared to those without such facilities. Therefore, providing adequate lactation rooms in government institutions, private companies, and factories is a concrete form of support for fulfilling the rights of both mothers and infants.

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AUTHOR CONTRIBUTION STATEMENT

All authors contributed significantly to the completion of this research. RY was primarily responsible for developing the research concept and design, constructing the methodology, collecting field data at the community health center, performing statistical analyses, and drafting the initial manuscript. UF provided academic supervision throughout the study, ensured methodological accuracy and data validation, and contributed to critical revisions and refinement of the manuscript. MJ curated and organized the data, conducted a thorough literature review to support the theoretical background, created visual representations of the findings, and participated actively in editing and finalizing the manuscript. All authors have read and approved the final version of the manuscript and are accountable for all aspects of the work.

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